

108A 2851 PCT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

RECEIVED

JAN 4 - 2000

Group 2700

In re Application of:
RYOZO SETOGUCHI

Serial No. 09/319,670

Filed: June 7, 1999

For: PARALLEL PROCESSING DEVICE FOR
GENERATING SHAPE AND/OR
DISPLAYING IMAGE



Group Art Unit: 2774

Examiner: unknown

**INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR 1.97(b)(3)**

Hon. Commissioner of Patents and Trademarks
Washington, D.C. 20231

Dear Sir,

Pursuant to 37 CFR 1.56, 1.97 and 1.98, Applicant for the above-identified application hereby submits legible copies of the following relevant arts along with form PTO/SB/08A which contains the information required by 37 CFR 1.98(b):

- A. Article titled "Parallel Graphic Processing" published in Japan in 1991;
- B. Japanese Patent Application Laid-Open No H4-348485 published in Japan on December 3, 1992;
- C. Japanese Patent Application Laid-Open No. H2-219184 published in Japan on August 31, 1990;
- D. Article titled "Photo-Realistic Image Generation System for Realtime Animation" published in Japan on February 23, 1989; and
- E. Article titled "Graphics Processing System Using Multiprocessor-based Graphic Computer -MAGIC-" published in Japan on September 29, 1988.

The above-listed prior arts A through C, which are all in Japanese, are cited in the

International Search Report issued by Japanese Patent Office to the PCT Application No. PCT/JP96/03599, upon which the present US application was filed.

Though these prior arts are in non-English language, the Search Report (a copy thereof previously filed) is written in English and the degree of relevance is indicated therein by way of the markings of X and A along with the explanation of such markings. Accordingly, pursuant to MPEP Section 609, the requirement for a concise explanation of relevance pursuant to 37 CFR 1.1.98(a)(3) for each of these non-English language prior arts is satisfied, and an English concise explanation thereof is omitted herein.

The prior arts D and E were both cited in the International Preliminary Search Report (a copy thereof previously enclosed) issued by Japanese Patent Office to the above-identified PCT application. Since these prior arts are in non-English language, Japanese, a concise explanation of relevance of each one of these prior arts required pursuant to 37 CFR 1.1.98(a)(3) is presented below:


The prior art D discloses shaded image generator 2 (SIG 2) which is a multi process system for generating high-speed and high-quality images. SIG 2 has 36 unit-processors that are arranged parallel, and each of which has a maximum performance of 10 MIPA (million instructions per second) / 20 MFLOPS (mega floating-point operations per second). As described in the English Abstract of this prior art, these programmable unit-processors receive cod or data through VME-bus and execute instruction independently; and so as to perform high-speed image output to HDTC frame-memory, each unit-processor has high speed image bus interface whose band width is 10 million pixels per second, so that SIG 2 generates 10 photo--realistic 3-D image per second that have global illumination effect

The prior art E discloses an employment of four processing elements that are programmable and comprise a multiprocessor-based all-round graphic image computer (MAGIC)


and perform parallel processing of computer graphics, thus realizing a fast computation environment for various image generating algorithms with the use of scan-line algorithm, ray-tracing algorithm and pixel-selected ray-tracing algorithm in addition to 3-D graphics description tools.

It is, therefore, hereby respectfully requested that the Patent Office make a record of these relevant arts and consider them during the examination of the above-identified application.

Respectfully submitted,
KODA & ANDROLIA

By: 
H. Henry Koda
Reg. No. 27,729

10100 Santa Monica Blvd.
Suite 2340
Los Angeles, CA 90067
Tel: (310) 277-1391
Fax: (310) 277-4118

Certificate of Mailing
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents and Trademarks, Washington, D.C. 20231 on 12-27-99 (date of deposit)
H. HENRY KODA
Typed or printed name of person signing this certificate
 Signature 12-27-99 Dated